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KATAOKA KATSUYUKI**(54) FEED FOR RELAXING STRESS****(57)Abstract:**

PROBLEM TO BE SOLVED: To obtain a feed containing a highly glutathione-containing yeast, etc., capable of inhibiting stomach ulcer, lowering a disease-generating rate and reducing fatigue caused by movements on transportation by a greatly inexpensive and simple method, excellent in growability, and useful for relaxing the stress of fowls and domestic animals such as cattle.

SOLUTION: This feed contains a highly glutathione-containing yeast such as torula yeast, bread yeast or beer yeast or a mixture of glutathione with a yeast. When e.g. a feed using dry torula yeast containing reduction type glutathione in a concentration of 3% is used, the feed for relaxing the stress is administered at a daily dose of 0.05-4.0g per kg of the body weight of a target animal.

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CLAIMS

[Claim(s)]

[Claim 1] Livestock, feed for stress relaxation of domestic fowls which are characterized by coming to contain the mixture of high glutathione content yeast, or a glutathione and yeast.

[Claim 2] Livestock according to claim 1 high glutathione content yeast and whose yeast are torula yeast, baker's yeast, and beer yeast, feed for stress relaxation of domestic fowls.

[Claim 3] Livestock according to claim 1 high glutathione content yeast and whose yeast are torula yeast, feed for stress relaxation of domestic fowls.

[Claim 4] The livestock, the stress relaxation approach of domestic fowls which are characterized by medicating livestock and domestic fowls with the mixture of high glutathione content yeast, or a glutathione and yeast.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the feed for stress relaxation, and the stress relaxation approach. It is related with the stress relaxation approach of medicating livestock, domestic fowls, etc. with the mixture of the yeast of the feed for stress relaxation, such as livestock which come to contain the mixture of the yeast of a high glutathione content, or a glutathione and yeast, and domestic fowls, and a high glutathione content, or a glutathione and yeast in detail.

[0002]

[Description of the Prior Art] It is said that the present age is a time of stress. Stress poses not only a man but a big problem also for an animal.

[0003] On the cow which is livestock, a pig, a hen, and a horse, the stress by physical environment, such as the environment of a barn, for example, atmospheric temperature, and moisture, and biotical environment, such as a disease germ and livestock, becomes a cause, and control of the generative function, the fall of productivity, the increment in an illness incidence rate, and generating of a gastric ulcer take place. Moreover, the stress of the degree of pole has started by upheaval of environments, such as an agitation by mixed loading with fatigue by rocking on a truck, and a strange cow and a strange pig, and chill summer heat of the external world, also at the time of transportation. Consequently, the infectivity illness which is mainly concerned with pneumonia after transportation may happen, or diarrhea may be caused. There is also a report (67 Proc. Jpn. Anim. Biochem. 20, 59- 1987) -- if the truck line of the cow is carried out, the rise of the cortisol concentration in plasma, the increment in a white blood cell count, and alternative reduction of T mold lymphocyte will be accepted -- that truck line induces change of a cellular immunity function.

[0004] moreover -- the livestock for meat -- the transportation before slaughter -- in addition, deterioration of texture may take place owing to the stress by the fast after slaughter place carrying in, ****, **** in an overcrowded condition, the compulsive last spurt in front of slaughter, etc.

[0005] Those who keep a pet with recently in an apartment are increasing in number. The action range is restricted to the narrow interior of a room, and he cannot do traffic with outdoors freely, but from the stress that there is also no alternating current with other individuals, the pet kept in an apartment etc. runs about in the room, or if he is a dog, he will come to make a column, pawl grinding in furniture, etc. frequent with ***** and a cat. The anomalous behavior by such environmental stressor is seen by the animal of a zoo. For example, it is the tongue play of KIRIN. KIRIN of a zoo often sees lengthening a long and slender tongue from opening by momentary earliness, or retracting it. This action is the action which is not looked at by KIRIN which is freely alive in the vast prairie, it is shut up into a narrow fence, and the stress from which the free life was taken is said to be the cause.

[0006] In order to prevent the evil by such stress (for example, in order to prevent deterioration of the texture of a pig) Change the slaughter method of a pig into a **** conveyor method from the conventional TWY mold strainer method of V characters, it changes into making time amount from the last feed to slaughter into less than 30 hours, and the quality of the material which cannot slide on the

floor of a truck easily about transportation, or there is also a meat pin center, large which is guiding preparing a batch frame, building a collection-of-cargo schedule which shortens transportation time amount, etc.

[0007]

[Problem(s) to be Solved by the Invention] To the stress by feeding management of livestock, the **** remedy is not taken from the ability of many stressors to be considered. It is because costs with it start. [great / since most stressors are concerned with feeding facilities, such as the quality of the material of a floor and spatial breadth of *****, / in order to improve] Moreover, the costs which reconstruction of a transportation truck is needed or start temporarily also about the space transportation system of livestock are large. Moreover, although there is also a meat pin center, large which is performing instruction which transportation time amount is becoming long and was inevitably mentioned above from the collection-of-cargo area being expanded with maintenance of a slaughter place and enlargement in the object for meat, since the area spreads out, thoroughness is difficult and very slight nationally.

[0008]

[Means for Solving the Problem] In order to solve this trouble, as a result of trying hard wholeheartedly, by prescribing the desiccation torula yeast of a high glutathione content for the patient, this invention persons find out that stress is eased and a gastric ulcer is controlled, and came to complete this invention.

[0009] That is, the stress relaxation approach of livestock and domestic fowls characterized by medicating livestock and domestic fowls with the mixture of the feed for stress relaxation of livestock and domestic fowls and high glutathione content yeast, or the glutathione and yeast that are characterized by this invention coming to contain the mixture of high glutathione content yeast, or a glutathione and yeast is offered.

[0010] The high glutathione content yeast as used in the field of this invention means the yeast with which the usual glutathione production yeast contains the glutathione of the glutathione which it has in a fungus body 100 times the abbreviation [about 5 -] of this in a fungus body, and means the yeast which contains the glutathione of about 0.5 - 7 % of the weight of abbreviation preferably per [0.3 / about] dried cell - 10 % of the weight of abbreviation. As high glutathione content yeast, torula yeast, baker's yeast, beer yeast, etc. are raised, and torula yeast is especially desirable.

[0011] Moreover, in this invention, it can change to high glutathione content yeast, and mixture with yeast, purification, or a rough purification glutathione can also be used.

[0012] As this yeast, for example, torula yeast, baker's yeast, beer yeast, etc. are raised, and torula yeast is especially desirable.

[0013] When using mixture with yeast, purification, or a rough purification glutathione, it is desirable to blend so that it may become the ratio of the fungus body in high glutathione content yeast and the amount of glutathiones.

[0014] In addition, the glutathione as used in the field of this invention means reduced glutathione, oxidized glutathiones, or such mixture.

[0015] As the livestock set as the object of invention, and domestic fowls, for example A cow, a pig, a hen, a horse, the sheep, An ass, Rabbah, a wild boar, INOBUTA, a rabbit, a quail, a duck, a bantam, A dog besides typical livestock, such as a game fowl, a pigeon, and a Meleagris gallopavo, and domestic fowls, a cat, a monkey, a hamster, Companion animals, such as a mouse, a rat, a hill myna, a parrot, a parakeet, and a canary, The various animals which sense stress are raised with the mammals other than Homo sapiens which can breed the animal bred in zoos, such as KIRIN, an elephant, a hippo, LION, a dolphin, and Orcinus Orca, in domestic [so-called] and the so-called zoo, birds, reptiles, an amphibian, etc.

[0016]

[Embodiment of the Invention] The feed for stress relaxation of this invention blends high glutathione content yeast, as feed which can be blended, if it is feed with which livestock and domestic fowls are presented, there will be especially no limit and commercial feed will be used as it is. Moreover, into

feed, various kinds of additives may be blended according to the class of object animals, such as drugs, such as various vitamins (vitamin A, B1, B-2, B6, C, D2, D3, E, etc.), minerals (iron, magnesium, etc.), amino acid (a glycine, an alanine, a valine, MECHIONNIN, threonine, etc.), a lipid, fats and oils (beta carotene, fatty-acid calcium, etc.), or an antibiotic, and the situation.

[0017] Although the loadings of high glutathione content yeast are arbitrary, when the desiccation torula yeast which contains reduced glutathione 3% is used for example, it is desirable to blend so that it may become one days of about 0.05 - 4.0g of abbreviation per weight kg of the target animal.

[0018] What is necessary is for a viable cell or fungus body processing objects (a dried cell, dried cell polish object, etc.) to be sufficient as high glutathione content yeast, and just to be only able to add it to the usual mixed feed.

[0019] Moreover, the approach of preparing and medicating the approach and pellet which the approach and water which direct or other feed, water, an oil, etc. are made to suspend, and are directly sprinkled on the usually given feed as a medication method in the stress relaxation approach of this invention, an oil, etc. are made to suspend, and are administered orally compulsorily, a clan bull, etc. is raised.

[0020] Especially the manufacture approach of a pellet is not limited and the approach using a disk pelleter, an extruder, etc. is raised.

[0021] A dose is one days of about 0.05 - 4.0g of abbreviation per weight kg of the target animal, when the desiccation torula yeast which contains reduced glutathione 3% is used.

[0022]

[Example] Hereafter, although an example explains this invention to a detail further, this invention is not limited to these.

[0023] in addition -- the quantum of the inside of the example of the following experiment, and an example, and corticosterone -- cortisol Nutrition research (cortisol measurement kit: EIKEN CHEMICAL CO., LTD. make) and Aloka 50 well -- gamma system ARC950 was used.

[0024] It divided each 20 example of experiment 1 rats into the high glutathione content desiccation torula yeast administration division and each division non-prescribed a medicine for the patient, and high glutathione content desiccation torula yeast (3% of glutathione contents) made this water suspension, and it carried out forcible internal use for ten days using the sound so that it might be set to 0.67g (20mg as a glutathione) per day per weight kg of a rat. Forcible internal use of the tap water was carried out for ten days in the division non-prescribed a medicine for the patient. In addition, feed (commercial rat pellet) and water were considered as free intake throughout [trial term]. After carrying out 7 time-stress load of the rat which abstained from food after the last administration for about 20 hours by the submersion restricted ulcer method ("animal-model use collection for new drug development", 249 pages, R&D planning 1985 issue), immediately after [the] and 6 hours after, it collected blood from each five divisions, and the corticosterone in a blood serum was measured.

[0025] A result is shown in Table 1.

[0026]

[Table 1]

表 1

		無投与区	高グルタチオン含量 トルラ酵母投与区
血中コルチコステロン 濃度 (μg/dl)	食荷直後	9. 7 8	8. 5 0
	6時間後	1 2. 4 6	9. 2 8

[0027] From the result of Table 1, although the corticosterone concentration in a blood serum which rose after the stress load in the division non-prescribed a medicine for the patient did not decrease even if it passed after the stress load for 6 hours, 6 hours after, it decreased to this level immediately after the stress load, and it was checked in the high glutathione content desiccation torula yeast administration division that it is in the inclination for stress to be eased.

[0028] Respectively, the high glutathione content desiccation torula yeast administration division which carried out the stress load by the submersion restricted ulcer method in the example 1 of example of experiment 2 experiment, the division non-prescribed a medicine for the patient, and the die length (mm) of the damage generated to gland stomach membrane about five rats were measured, and the average of the grand total was made into the ulcer multiplier (U. Imm) per animal.

[0029] A result is shown in Table 2.

[0030]

[Table 2]

表 2

	無投与区	高グルタチオン含量 トルラ酵母投与区
潰瘍係数 (U. 1 mm)	16.6	8.0
抑制率 (%)	—	51.8

*抑制率は、無投与区を基準として求めた。

[0031] The result of Table 2 showed that a gastric ulcer was controlled in the high glutathione content desiccation torula yeast administration division compared with the division non-prescribed a medicine for the patient.

[0032] The example of the dry hood for example 1 dogs is shown in Table 3.

[0033]

[Table 3]

表 3

配合成分	配合率 (%)
高グルタチオン含量乾燥トルラ酵母	4
とうもろこし	9
小麦粉	14
えん麦	12
肉骨粉	15
脱脂粉乳	3
大豆油粕	15
魚粉	11
ふすま	5
小麦胚芽	3
植物油	3
ビタミン・ミネラル混合物	6

[0034]

[Effect of the Invention] As compared with Prior arts, such as an improvement of a facility, and thoroughness of notes at the time of transportation, the feed for stress relaxation and the stress relaxation approach of this invention are a very cheap and easy approach it is only to medicate livestock, domestic fowls, etc., and show effectiveness to stress relaxation of livestock, domestic fowls, etc. as explained in full detail above.

[Translation done.]